

least once by a substantial percentage of persons in this study. These data provide insight into care for persons at the end of life, particularly among persons with cancer. Furthermore, this information may be useful as a process indicator of the quality of end of life care.

GASTROINTESTINAL DISORDERS—Cost Studies

PGI4

INCLUSION OF A PENTAVALENT ROTAVIRUS VACCINE IN THE NEW ZEALAND CHILDHOOD IMMUNISATION SCHEDULE

Milne RJ¹, Grimwood K², Saunders K³

¹University of Auckland, Auckland, New Zealand, ²University of Otago, Wellington, New Zealand, ³Health Outcomes Associates Ltd, Auckland, New Zealand

OBJECTIVES: To estimate: (i) the current rotavirus burden in New Zealand children less than 5 years of age; and (ii) the annual health benefits, budget impact and cost-effectiveness of including Rotateq, a pentavalent live-attenuated oral rotavirus vaccine, in the annual Childhood Immunisation Schedule. **METHODS:** A spreadsheet model was based on local epidemiology and costs plus the findings of a large phase III clinical trial showing that RotaTaq had 94.5% efficacy against rotavirus hospital presentations and 86.0% against non-urgent medical visits. In the base case, vaccine uptake was 85% and the annual discount rate was 5%. **RESULTS:** We predict annually 1356 admissions, 2781 ED presentations and 9495 primary-care consultations at an annual societal cost of \$7.8M (\$27.68/child; two-thirds Government, one-third caregivers). Vaccinating successive birth cohorts becomes increasingly effective and cost-effective as more children become immune. After five years (assuming 85% annual uptake of 3 doses), 7936 cases seeking medical attention (1105 admissions, 2215 ED presentations, 6941 primary-care consultations) would be averted. At an acquisition cost of \$50/dose, the incremental cost to Government is \$6.41 M in year-1 and \$3.35 M in year-5. Societal cost in year-5 would be \$1301 to avert one hospitalisation and \$139 to avert one health care presentation. The annual cost to Government is \$3.38 M to avert 7936 cases of paediatric rotavirus gastroenteritis that would otherwise require medical attention. The incremental cost and cost/admission averted are moderately sensitive to rotavirus incidence rates, declining protection over 5 years (if any), and vaccine unit price, but robust to uncertainty in other parameters. The budget impact of vaccination will lessen slightly and the cost-effectiveness will improve slightly beyond year-5, provided protective efficacy is maintained in school-aged children. **CONCLUSION:** Addition of a pentavalent rotavirus vaccine to the New Zealand Childhood Immunisation Schedule would confer important clinical gains at a modest annual cost.

PGI5

PHARMACOECONOMICS OF CHRONIC HEPATITIS C IN SLOVAKIA

Bielik J

Trencin University, Trenčín, Slovak Republic

OBJECTIVES: To investigate the cost-effectiveness of therapy of chronic hepatitis C with peginterferon alfa-2b and ribavirin in the context of the Slovak health care system. **METHODS:** We retrospectively obtained clinical data on the cost of treatment in 140 patients with chronic hepatitis C or advanced chronic liver disease of other etiology. Life-time cost of untreated and treated chronic hepatitis C was calculated using the Markov model and cost-effectiveness of antiviral therapy was evaluated by cost per life-year saved (LYS) analysis. **RESULTS:** The average medical

cost per patient-year in case of chronic hepatitis C not treated with antiviral drugs, compensated cirrhosis, complicated cirrhosis, and after liver transplantation was 578 USD Sk (33,50 Slovak crowns = 1 USD), 926 USD, 5890 USD, and 9997 USD, respectively. The cost per life-year saved using 3% discounting was 3156USD in the average group of patients and 5711USD in patients with genotype 1. In patients with genotype 2 and 3 antiviral treatment would result in a life-time cost saving of 492 USD per patient. **CONCLUSION:** The cost of treatment of chronic hepatitis C and other chronic liver diseases in Slovakia is comparable with countries with more advanced economies. The treatment of chronic hepatitis C with peginterferon alfa-2b and ribavirin in Slovakia is cost-effective based on pharmacoeconomic calculations.

PGI6

BURDEN OF POST-OPERATIVE ILEUS (POI) IN COLECTOMY SURGERY PATIENTS IN THE UNITED STATES

Iyer S¹, Saunders WV²

¹Wyeth Research, Collegeville, PA, USA, ²Premier, Inc, Charlotte, NC, USA

OBJECTIVES: To study the impact of post-operative ileus (POI) on health care utilization and costs in colectomy surgery patients in the United States. **METHODS:** A retrospective cohort study design was used. Adult patients with a principal procedure code for colectomy (ICD-9 codes 45.71–45.79), discharged between Jan. 2004 and Dec. 2004 were identified from Premier's Perspective Comparative Database, an inpatient records database from over 500 hospitals in the United States. The colectomy patients were further classified for the presence of POI, defined as presence of paralytic ileus (ICD-9 code 560.1) and/or digestive system complications (ICD-9 code 994.1) during the study period. Hospital length of stay (LOS), ICU LOS, ventilator usage, and hospitalization costs were compared using t-tests and chi-square tests as appropriate. **RESULTS:** A total of 17,896 patients with primary procedure code for colectomy were identified, of which 3115 (17.4%) patients were classified for presence of POI, including paralytic ileus (N = 2732; 15.3%) and digestive system complications (N = 1899; 10.6%), with significant overlap between the two (N = 1516; 8.5%). A majority of the patients with POI were male (54.9%), caucasian (70.9%) and in the 51–64 year age group (51%). The average hospital LOS was significantly higher (p < 0.001) in patients with POI (13.6 ± 13.3 days) compared with patients without POI (8.6 ± 9.5 days). The average ICU LOS was significantly higher (p < 0.001) in patients with POI (2.4 ± 8.6 days) compared with patients without (1.2 ± 9.5 days). Ventilator usage was found to be significantly higher (p < 0.001) in the POI group (17.0%) compared to those without (12.4%). Average hospitalization costs were significantly higher (p < 0.001) in the patients with POI (\$25,089 ± 35,386) than those without POI (\$16,907 ± 29,320). **CONCLUSION:** Post-operative ileus in colectomy patients is associated with increased hospital resource utilization. Prevention of POI could reduce hospital length of stay and costs.

PGI7

HEALTH CARE UTILIZATION AND COSTS ASSOCIATED WITH CONSTIPATION (C-ONLY) AND CO-OCCURRING IRRITABLE BOWEL SYNDROME AND CONSTIPATION (IBS+C) COMPARED TO MIGRAINE IN A LARGE MANAGED CARE POPULATION

Mitra D¹, Davis KL¹, Baran RW²

¹RTI Health Solutions, Research Triangle Park, NC, USA, ²Takeda Pharmaceuticals North America, Deerfield, IL, USA